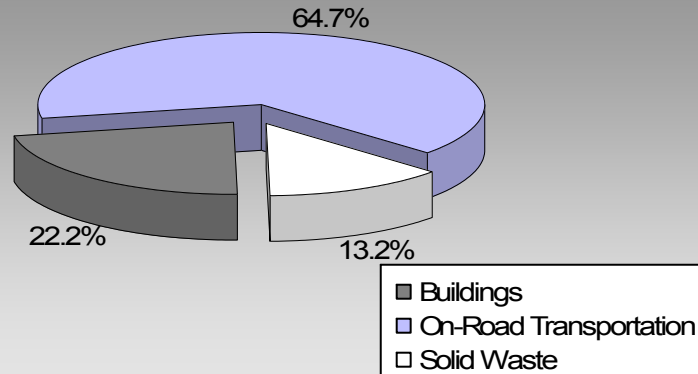


# Updated 2007 Community Energy and Emissions Inventory

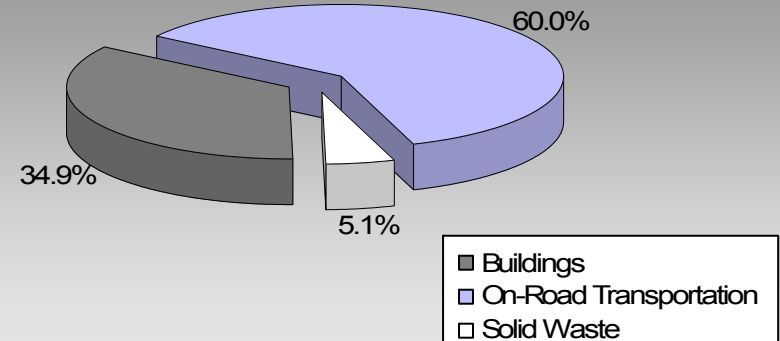
BC's Community Energy and Emission Inventories...supporting efforts towards Complete, Compact, Energy-Efficient Communities

## Where are the majority of our community's emissions coming from?

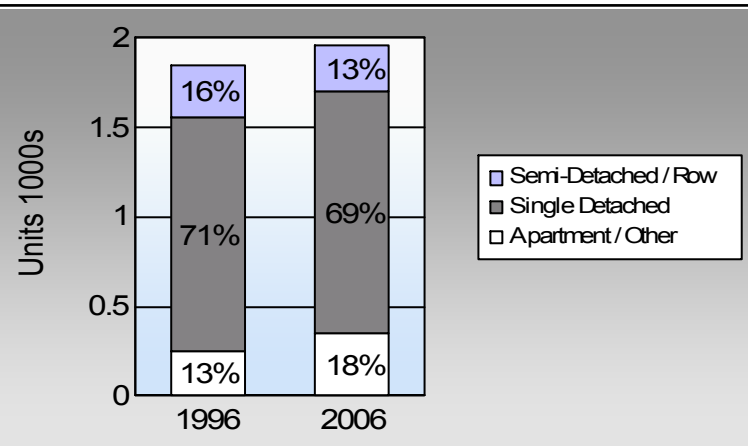
**Oliver Town  
2007 GHG Emissions Sources**



**Total for BC  
Communities**








### Are we living more compactly? Housing Type



In BC, single family detached housing made up 49% of housing in 2006.

### Are we driving less? Commute To Work

	1996	2006
	75.1%	71.6%
	6.3%	9.8%
	1.9%	0.0%
	13.0%	13.8%
	0.7%	1.8%

In BC, 10% of people took transit, 7% walked, and 2% cycled to work in 2006.

### Residential Density

Oliver Town: 12.1 people per net ha

BC municipal average: 7.4 people per net ha

### Are we living closer to where we work? Commute Distance

This data is currently unavailable in the CEEI 2007 Reports

In BC, 41% of people lived within 5km of their work in 2006.

## Sectors

<b>On Road Transportation</b>		<u>Vehicles</u>	<u>Consumption</u>	<u>Measurement</u>	<u>Average-VKT(km)</u>	<u>Energy (GJ)</u>	<u>CO2e (t)</u>
Small Passenger Cars	Gasoline	1,071	1,337,707	Litres	12,398	46,820	3,161
	Diesel Fuel	36	31,507	Litres	13,276	1,207	86
<b>Small Passenger Cars</b>						<b>48,027</b>	<b>3,247</b>
Large Passenger Cars	Gasoline	728	1,602,727	Litres	18,182	56,095	3,780
	Diesel Fuel	14	31,365	Litres	18,181	1,201	86
	Other Fuel	< 10	981	Litres		38	2
<b>Large Passenger Cars</b>						<b>57,334</b>	<b>3,868</b>
Light Trucks, Vans, SUVs	Gasoline	1,619	4,825,726	Litres	20,233	168,900	11,480
	Diesel Fuel	174	438,432	Litres	20,691	16,792	1,198
	Other Fuel	14	37,075	Litres	12,973	1,420	57
<b>Light Trucks, Vans, SUVs</b>						<b>187,112</b>	<b>12,735</b>
Commercial Vehicles	Gasoline	20	108,592	Litres	14,311	3,801	254
	Diesel Fuel	30	159,092	Litres	22,966	6,093	428
	Other Fuel	< 10	9,337	Litres	11,356	358	14
<b>Commercial Vehicles</b>						<b>10,252</b>	<b>696</b>
Tractor Trailer Trucks	Diesel Fuel	54	1,220,368	Litres	57,690	46,740	3,284
<b>Tractor Trailer Trucks</b>						<b>46,740</b>	<b>3,284</b>
Motorhomes	Gasoline	62	83,925	Litres	3,295	2,937	196
	Diesel Fuel	14	14,354	Litres	4,650	550	39
	Other Fuel	< 10	1,108	Litres	2,189	42	2
<b>Motorhomes</b>						<b>3,529</b>	<b>237</b>
Motorcycles, Mopeds	Gasoline	68	29,669	Litres	6,312	1,038	69
<b>Motorcycles, Mopeds</b>						<b>1,038</b>	<b>69</b>
Bus	Gasoline	< 10	16,093	Litres	15,902	563	38
	Diesel Fuel	12	101,342	Litres	19,078	3,881	273
	Other Fuel	< 10	4,389	Litres		168	7
<b>Bus</b>						<b>4,612</b>	<b>318</b>

# Oliver Town

## Updated 2007 Community Energy and Emissions Inventory

	Gasoline:	280,154	18,978
	Diesel:	76,464	5,394
	Other Fuel:	2,026	82
<b>On Road Transportation Totals</b>	<b>All Fuels:</b>	<b>358,644</b>	<b>24,454</b>

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)	
Residential	Electricity	2,277	27,998,754	Kilowatt Hours	100,795	168	
	Natural Gas	1,257	75,593	GigaJoules	75,593	3,855	
	Heating Oil		1,712	GigaJoules	1,712	121	
	Propane		3,022	GigaJoules	3,022	184	
	Wood			15,065	GigaJoules	15,065	6
<b>Residential</b>					<b>196,187</b>	<b>4,334</b>	
Commercial/Small-Medium Industrial	Electricity	1,048	39,237,267	Kilowatt Hours	141,254	236	
	Natural Gas	201	74,720	GigaJoules	74,720	3,811	
<b>Commercial/Small-Medium Industrial</b>					<b>215,974</b>	<b>4,047</b>	
					Electricity:	242,049	404
					Natural Gas:	150,313	7,666
					Propane:	3,022	184
					Wood:	15,065	6
					Heating Oil:	1,712	121
<b>Buildings Totals</b>	<b>Buildings:</b>				<b>412,161</b>	<b>8,381</b>	

Solid Waste	Mass (t)	CO2e (t)
Community Solid Waste	6,000	4,980

# Oliver Town

## Updated 2007 Community Energy and Emissions Inventory

Grand Total	CONSUMPTION	ENERGY (GJ)	CO2e (t)
Diesel Fuel	1,996,460 L	76,464	5,394
Electricity	67,236,021 kWh	242,049	404
Gasoline	8,004,439 L	280,154	18,978
Heating Oil	1,712 GJ	1,712	121
Natural Gas	150,313 GJ	150,313	7,666
Other Fuel	52,890 L	2,026	82
Propane	3,022 GJ	3,022	184
Solid Waste	6,000 T	0	4,980
Wood	15,065 GJ	15,065	6
<b>Total of Transportation / Buildings / Solid Waste:</b>		<b>770,805 GJ</b>	<b>37,815 tonnes</b>

### Memo Items

Buildings	Type	Connections	Consumption	Measurement	Energy (GJ)	CO2e (t)
Large Industrial	Electricity	4	36,176,779	Kilowatt Hours	130,236	217
<b>Large Industrial</b>					<b>130,236</b>	<b>217</b>

## Supporting Indicators

Below you will find supporting indicators for which data is provided. These are the first five supporting indicators for which data is provided as a part of the updated 2007 CEEI. Columns with all zeros indicate data unavailable in these CEEI reports. Thirteen additional supporting indicators are under consideration for future reports (see next page). Local government feedback is requested on all supporting indicators. Please take the time to complete the short CEEI Survey at <http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html> or contact us directly at [CEEIRPT@gov.bc.ca](mailto:CEEIRPT@gov.bc.ca)

### Housing Type - Private dwellings by structural type

Housing type is important for reducing building-related GHG emissions and energy consumption. A trend toward fewer single family dwellings indicates an increase in residential density, which is known to reduce transportation-related GHG emissions.

	1996		2001		2006	
	Units	%	Units	%	Units	%
Single Detached House	1,305	41	1,240	66	1,350	69
Semi-Detached House	50	2	45	2	30	2
Row House	240	8	225	12	230	12
Apartment, Duplex	30	1	35	2	35	2
Apartment, 5 storeys or higher	0	0	0	0	0	0
Apartment, under 5 storeys	215	7	245	13	245	13
Other Single Attached House	0	0	10	1	15	1
Movable Dwelling	0	0	80	4	50	3

### Commute to Work - Employed labour force - by mode of commute

An increase in the number of people choosing to walk, cycle and use transit reduces GHG emissions. More compact, complete, connected communities should see an increase in the use of these transportation modes.

	1996		2001		2006	
	People	%	People	%	People	%
Car, Truck, Van as Driver	1,010	75	880	70	985	72
Car, Truck, Van as Passenger	85	6	115	9	135	10
Public Transit	25	2	10	1	0	0
Walked	175	13	210	17	190	14
Bicycle	10	1	10	1	25	2
Motorcycle	0	0	0	0	10	1
Taxicab	0	0	0	0	0	0
Other Method	40	3	30	2	30	2

### Residential Density

\* Net of Crown land, parks, Indian Reserves, water features, airports, ALR, waste disposal sites.

Increasing residential densities is known to reduce vehicle use resulting in fewer transportation-related GHG emissions. There are many additional benefits from more compact development.

	2009
Population	4,783.0
Net Land Area (ha) *	396.3
Residential Density (people per net ha)	12.1

### Commute Distance

Shorter commute distances generally reduce GHG emissions by increasing the likelihood of people walking, cycling or using transit. Commute distance is also indicative of the 'completeness' of a community from an employment perspective.

	2006
	People %
This data is currently unavailable in the CEEI 2007 Reports.	

### Parks and Protected Greenspace

\* Total is net of Indian Reserves

\*\* The quantity of parkland may be underestimated

Parks and protected greenspaces are important for the protection and enhancement of community carbon sinks.

	2009	
	Area (ha)	%
National Parks	0.0	0.0
Provincial Parks / Protected Areas	1.3	0.2
Local Parks	17.4	3.0
Agricultural Land Reserve	130.0	22.1
Other land use	441.0	74.8
<b>Total Land Area</b>	<b>589.7</b>	<b>100.0</b>

## Updated 2007 Community Energy and Emissions Inventory

### Supporting Indicators Under Consideration

The following supporting indicators are under consideration for inclusion in future CEEI reports. The 2007 CEEI reports provide these 'placeholder' indicators to give indication of data that may be provided in the future by the Province on an ongoing basis to assist in monitoring actions to reduce GHG emissions and energy consumption. Please submit feedback to [CEEIRPT@gov.bc.ca](mailto:CEEIRPT@gov.bc.ca) (see survey on CEEI website).

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#### On-Road Transportation (and Land Use)

Proximity to Transit	Persons, dwelling units (du) and employment within 400m of a quality transit stop/line
Proximity to Services	Persons and dwelling units (du) within 400m of services (e.g. grocery store, school, other retail etc.)
Transit Ridership	Annual per capita transit ridership

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#### Buildings

Residential; Public Building Energy Intensity	Average energy use per person per square metre of floor space
Floor Space	Average residential dwelling unit size

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#### Solid Waste (and Water)

Waste Diversion	Tonnes of waste diverted
Avoided Waste Emissions	Tonnes of CO <sub>2</sub> e of avoided future emissions due to reduced waste since 2007
Water Use	Per capita residential water use

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#### Land-Use Change

Impervious Surface Cover	% change in impervious surface cover
Tree Canopy Cover	% change in tree canopy cover

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#### Community and Renewable Energy Supply

District Energy	# and energy output (e.g. buildings connected, energy consumed in GJ or kWh) of district energy systems by energy type (e.g. renewable or non-renewable)
On-Site Renewable Energy	# and energy output (in GJ or kWh) from households producing and/or consuming on-site renewable heat (e.g. biomass, solar thermal, geo-exchange) and/or electrical (e.g. solar photovoltaic, small wind, small scale hydro) energy
Energy Recovery From Waste	Energy (GJ or kWh) recovered from waste (e.g. from landfill gas, sewage treatment, industrial operations, farm)

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## Updated 2007 Community Energy and Emissions Inventory

# This is your local government's Updated 2007 Community Energy and Emissions Inventory (CEEI) Report

### What is a CEEI Report?

CEEI Reports are a result of a multi-agency effort to provide a province-wide solution to assist local governments in BC to track and report on community-wide energy consumption and greenhouse gas (GHG) emissions every two years. CEEI Reports are one of the many resources available through the Climate Action Toolkit (<http://www.toolkit.bc.ca>), a web-based service provided through the ongoing collaboration between UBCM and the Province.

### Why does my local government need a CEEI Report?

A community energy and GHG emissions inventory can be a valuable tool that helps local governments plan and implement GHG and energy management strategies, while at the same time strengthening broader sustainability planning at the local level. CEEI reports fulfill local governments' Climate Action Charter commitment to measure and report their community's GHG emissions profile, establish a base year inventory for local governments to consider as they develop targets, policies, and actions related to BC's *Local Government Act* requirements, and fulfill Milestone One requirements for those local government members of the Federation of Canadian Municipalities' (FCM's) Partners in Climate Protection (PCP) program.

### A first in North America!

CEEI is a first in North America and a first step for BC communities. The 2007 CEEI Reports are based on best available province-wide data. The accuracy and detail of CEEI reports will continue to improve to meet increasing local and provincial government information needs. Improvements have been made from the original draft 2007 CEEI Reports posted in Spring 2009. These include estimates for residential heating oil, propane and wood use, breaking out small and medium from large industrial buildings, including updated land-use change and new agricultural sectors as 'memo items', and the first of a suite of 'supporting indicators'. Following the 2010 CEEI Reports, inventories will be generated every two years, and will continue to improve as government information needs, international protocols and new data sources emerge.

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### For More Information:

- The full list of all BC local government Updated 2007 CEEI Reports, CEEI Data Summary Report, Technical Methods and Guidance Document, and additional information on the Secondary Indicators are available at: <http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html>.
- For guidance on target setting and community actions, go to <http://www.toolkit.bc.ca> and <http://www.cd.gov.bc.ca/lgd/greencommunities/targets.htm>.

### We Need Your Feedback:

- To continue to guide us on CEEI, particularly now with the new Indicators. Please take the time to complete the short CEEI Survey at <http://www.env.gov.bc.ca/cas/mitigation/ceei/index.html> or contact us directly at [CEEIRPT@gov.bc.ca](mailto:CEEIRPT@gov.bc.ca)

**Notice to the Reader:** This CEEI Report uses information from a variety of sources to estimate GHG emissions. While the methodologies, assumptions and data used are intended to provide reasonable estimates of greenhouse gas emissions, the information presented in this report may not be appropriate for all purposes. The Province of BC and the data providers do not provide any warranty to the user or guarantee the accuracy or reliability of the data contained in this report. The user accepts responsibility for the ultimate use of such data. We need your help to make these reports better, where you do note inaccuracies, please contact us.